



Invasive Plant Management Plan

What are invasive plants?

Invasive, non- native plants are introduced from other parts of the world. The spread of invasive plants is a primary cause of degradation to ecological systems. Invasive plants, also known as weedy or noxious plants, displace native plant and animal populations and reduce habitat and food sources for native insects, birds and other wildlife.

What species are in Yosemite and how do they spread?

Some of the worst plant invaders that currently pose the greatest ecological threat to Yosemite are:

- Yellow star- thistle (*Centaurea solstitialis*)
- Himalayan blackberry (*Rubus discolor*)
- Spotted knapweed (*Centaurea maculosa*)
- Perennial pepperweed (*Lepidium latifolium*)

Why should we be concerned?

Invasive plant species can have severe negative impacts on many of the cultural and natural features that make Yosemite a spectacular and enjoyable place to visit. Many invasive species are able to:

Displace Native Plants: Invasive species out- compete native plants for limited resources such as water, sunlight, and nutrients. Native plants are often reduced to small, isolated patches or can completely disappear from an area. Invasive species, together with habitat loss have caused the extinction of countless plant species in California.

Disrupt Native Wildlife: Many animals are adapted to use very specific plants for food and habitat. When desirable plants are replaced by invasive species, the animal's food source or habitat is lost. As native plants shrink in numbers, so will the number of animals that depend upon the plants. Additionally, many invasive species are poisonous or harmful to animals.

Change Fire Regimes: Invasive species can increase the frequency, seasonality, and intensity of fires in Yosemite National Park. Many native plants and animals that would otherwise be unaffected by invasive species can be displaced by changes to the fire regime.

Alter the Visitor Experience: Invasive plants can transform spectacular displays of showy wildflowers into large, unattractive monocultures. Thorns and irritants on invasives can transform inviting and accessible areas into impassable and unattractive thickets of thorns and brambles.

Impact Cultural Resources: Yosemite is home to numerous plant species used by Native Americans. These plants often thrive in areas now threatened by the spread of invasive species.

Cause Impacts Beyond Park Borders: Invasive species have no regard for political boundaries. They can rapidly spread from Yosemite onto adjacent lands outside of the park and inflict environmental and economic costs onto other agencies and private landowners.

What action is Yosemite currently taking to control invasive plants?

Yosemite has actively controlled invasive plant populations since the 1930s and these efforts continue today. Park staff has aggressively managed highly invasive species over the last several years. This control program includes the use of Geographic Positioning System technology to map plant populations. Crews then remove plants using a variety of techniques, including hand- pulling. Treated areas are photographed and re- visited each year to assess results and provide follow- up treatment.

What will the Invasive Plant Management Plan address?

This plan will explore alternatives for a comprehensive, prioritized program of prevention and early detection, control, systematic monitoring, and research. Some of the goals are to:

- Prevent new invasions through systematic early detection and prevention.
 - Prioritize existing populations and sites for control.
 - Reduce the number of existing plants to minimize threats to natural and cultural resources and scenic values.
 - Preserve plants and sites valued by Native Americans.
 - Reconcile potential conflicts between preservation of cultural landscapes and removal of invasive plants.
 - Promote restoration of native species and habitats in ecosystems that have been invaded by invasive plants.
 - Implement the most appropriate control technique for each species and site.
 - Ensure that the invasive plant program is regularly monitored and improved, environmentally safe, and is supported by science and research.
 - Promote an understanding of invasive species with park visitors, employees, park partners, and gateway communities.
 - Provide information to the public on when, where, and how control efforts will take place.
 - Control methods may include hand- pulling, use of mechanical weed removal tools, release of predatory insects or fungi, judicious use of chemical treatments derived from natural products such as vinegar and/or manufactured chemicals such as glyphosate.
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How can I request a copy of the plan?

The Parkwide Invasive Plant Management Plan and Environmental Assessment is scheduled to be released to the public in the summer of 2006. To request a copy of the draft document when it is released in spring 2006, contact the park in writing:

Mail: Superintendent
Attn: Invasive Plant Management Plan / EA
P.O. Box 577
Yosemite, CA 95389

Fax: 209/379- 1294

Email: yose_planning@nps.gov

The status of this and other Yosemite National Park improvement projects will be periodically updated on the park's planning website. Visit online:
www.nps.gov/yose/planning.
